



**DIVISION OF MINES
BOARD OF COAL MINING EXAMINERS
CERTIFICATION REQUIREMENTS**

SURFACE ELECTRICAL REPAIRMAN

Article 3 of the Coal Mine Safety Laws of Virginia establishes requirements for certification of coal mine workers. The certification requirements are included in §45.1-161.24 through §45.1-161.41 in which the Board of Coal Mining Examiners is established for the purpose of administering the certification program. The Board has promulgated certification regulations 4 VAC 25-20 (VR 480-04-2), which set the minimum standards and procedures required for Virginia coal miner examinations and certifications.

CERTIFICATION CLASSIFICATION: *Surface Electrical Repairman

This certification authorizes the holder to:

- Perform electrical work and inspections at surface locations of underground coal mines, preparation plants, and at surface (strip) coal mines (any surface location)
- Make examinations on electrical equipment
- Conduct and record results of electrical examinations

APPLICATION/EXPERIENCE REQUIREMENTS:

- Application (BCME-1) and \$10.00 fee 5 working days prior to examination
- One year of electrical experience in surface coal mining under the direction of a certified surface electrical repairman or appropriately related work experience approved by the Chief of the Division of Mines
- Six months credit will be granted for electrical training from a college, technical school, or vocational school
- Hold a General Miner Certification, if required by law. Miners who have Virginia coal mining experience prior to January 1, 1996, and wish to obtain general miner certification must provide proof of employment prior to January 1, 1996, or attend required general miner training.
- Current first aid training (MSHA first aid 5000-23 acceptable)

EXAMINATION REQUIREMENTS: A score of 80% on each element of the examination

ELEMENTS OF EXAM	NUMBER OF QUESTIONS
▪ Alternating Current (AC)	20
▪ Direct Current (DC)	20
▪ Circuits & Equipment/drawings (CE)	20
▪ Cable Splicing (CS)	20
▪ High Voltage (HV)	20
▪ Legal Requirements (LR)	20
▪ Permissibility (PR)	20
▪ First Aid (MM)	20
▪ Gas Detection - practical demonstration	
▪ Records - Practical Stations (5)	
1. Control Circuit Troubleshooting - Electrical Schematic Reading (ER)	
2. Electrical Examinations - Record Keeping (RK) (Surface)	
3. Cable Troubleshooting (CT)	
4. Circuit Breaker Troubleshooting (CB)	
5. Permissibility (PD)	

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RECOMMENDED REFERENCE/STUDY MATERIALS:

- Electrical Study Guide/Student Training Guide
- Coal Mine Safety Laws of Virginia
- BCME Requirements
- MSHA (Basic First Aid) Manual 3
- Title 30 CFR Parts 18, 75, 77
- Mine Gases Packet

The above mentioned study materials are available at the Department of Mines, Minerals and Energy's Big Stone Gap Office, Customer Assistance Center (276) 523-8233 and Keen Mountain Field Office (276) 498-4533.

***8 hours annual continuing education required to update certification.**

Revised 06/19/03